

47 <21> SEQ ID NO: 4

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/707,468B

DATE: 11/13/2002

TIME: 11:01:10

Input Set : N:\Cr4\12112002\I707468A.raw

Output Set: N:\CRF4\01032003\I707468B.raw

48 <211> LENGTH: 19
 49 <212> TYPE: DNA
 50 <213> ORGANISM: Artificial Sequence
 51 <220> FEATURE:
 52 <223> OTHER INFORMATION: Oligonucleotide primer
 53 <220> FEATURE:
 54 <221> NAME/KEY: misc_feature
 55 <222> LOCATION: (2)..(2)
 56 <223> OTHER INFORMATION: A or G or C or T/U
 57 <400> SEQUENCE: 4

W--> 58 tnccttgrrcc ccagtarwc

19

60 <210> SEQ ID NO: 5
 61 <211> LENGTH: 859
 62 <212> TYPE: PRT
 63 <213> ORGANISM: Mus musculus
 64 <400> SEQUENCE: 5

65	Met	Glu	Gln	Thr	Glu	Gly	Val	Ser	Thr	Glu	Cys	Ala	Lys	Ala	Ile	Lys
66	1				5				10					15		
67	Pro	Ile	Asp	Gly	Lys	Ser	Val	His	Gln	Ile	Cys	Ser	Gly	Gln	Val	Ile
68			20					25					30			
69	Leu	Ser	Leu	Ser	Thr	Ala	Val	Lys	Glu	Leu	Ile	Glu	Asn	Ser	Val	Asp
70			35					40					45			
71	Ala	Gly	Ala	Thr	Thr	Ile	Asp	Leu	Arg	Leu	Lys	Asp	Tyr	Gly	Val	Asp
72			50				55					60				
73	Leu	Ile	Glu	Val	Ser	Asp	Asn	Gly	Cys	Gly	Val	Glu	Glu	Glu	Asn	Phe
74			65			70				75					80	
75	Glu	Gly	Leu	Ala	Leu	Lys	His	His	Thr	Ser	Lys	Ile	Gln	Glu	Phe	Ala
76					85				90					95		
77	Asp	Leu	Thr	Gln	Val	Glu	Thr	Phe	Gly	Phe	Arg	Gly	Glu	Ala	Leu	Ser
78			100					105					110			
79	Ser	Leu	Cys	Ala	Leu	Ser	Asp	Val	Thr	Ile	Ser	Thr	Cys	His	Gly	Ser
80			115				120						125			
81	Ala	Ser	Val	Gly	Thr	Arg	Leu	Val	Phe	Asp	His	Asn	Gly	Lys	Ile	Thr
82			130				135					140				
83	Gln	Lys	Thr	Pro	Tyr	Pro	Arg	Pro	Lys	Gly	Thr	Thr	Val	Ser	Val	Gln
84			145				150				155				160	
85	His	Leu	Phe	Tyr	Thr	Leu	Pro	Val	Arg	Tyr	Lys	Glu	Phe	Gln	Arg	Asn
86			165						170					175		
87	Ile	Lys	Lys	Glu	Tyr	Ser	Lys	Met	Val	Gln	Val	Leu	Gln	Ala	Tyr	Cys
88			180					185					190			
89	Ile	Ile	Ser	Ala	Gly	Val	Arg	Val	Ser	Cys	Thr	Asn	Gln	Leu	Gly	Gln
90			195				200					205				
91	Gly	Lys	Arg	His	Ala	Val	Val	Cys	Thr	Ser	Gly	Thr	Ser	Gly	Met	Lys
92			210				215					220				
93	Glu	Asn	Ile	Gly	Ser	Val	Phe	Gly	Gln	Lys	Gln	Leu	Gln	Ser	Leu	Ile
94			225				230				235				240	
95	Pro	Phe	Val	Gln	Leu	Pro	Pro	Ser	Asp	Ala	Val	Cys	Glu	Glu	Tyr	Gly
96			245					250						255		
97	Leu	Ser	Thr	Ser	Gly	Arg	His	Lys	Thr	Phe	Ser	Thr	Phe	Arg	Ala	Ser

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/707,468B

DATE: 07/02/03

TIME: 11:11:17

Input File : N:\Cr4\12112002\I707468A.raw

Output Set : N:\CRF4\01032003\I707468B.raw

93		260		265		270
94	Ile	His	Leu	Ala	Arg	Thr
95				Ala	Pro	Gly
96				Gly	Val	Gln
97				Gln	Thr	Gly
98				Pro		
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/707,468B

DATE: 01/03/2003

TIME: 11:01:10

Input Set : N:\Cr4\12112002\I707468A.raw

Output Set: N:\CRF4\01032003\I707468B.raw

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147 Ala Glu Asp Glu Leu Arg Lys Glu Ile Ser Lys Ser Met Phe Ala Glu
148           660           665           670
149 Met Glu Ile Leu Gly Gln Phe Asn Leu Gly Phe Ile Val Thr Lys Leu
150           675           680           685
151 Lys Glu Asp Leu Phe Leu Val Asp Gln His Ala Ala Asp Glu Lys Tyr
152           690           695           700
153 Asn Phe Glu Met Leu Gln Gln His Thr Val Leu Gln Ala Gln Arg Leu
154           705           710           715           720
155 Ile Thr Pro Gln Thr Leu Asn Leu Thr Ala Val Asn Glu Ala Val Leu
156           725           730           735
157 Ile Glu Asn Leu Glu Ile Phe Arg Lys Asn Gly Phe Asp Phe Val Ile
158           740           745           750
159 Asp Glu Asp Ala Pro Val Thr Glu Arg Ala Lys Leu Ile Ser Leu Pro
160           755           760           765
161 Thr Ser Lys Asn Trp Thr Phe Gly Pro Gln Asp Ile Asp Glu Leu Ile
162           770           775           780
163 Phe Met Leu Ser Asp Ser Pro Gly Val Met Cys Arg Pro Ser Arg Val
164           785           790           795           800
165 Arg Gln Met Phe Ala Ser Arg Ala Cys Arg Lys Ser Val Met Ile Gly
166           805           810           815
167 Thr Ala Leu Asn Ala Ser Glu Met Lys Lys Leu Ile Thr His Met Gly
168           820           825           830
169 Glu Met Asp His Pro Trp Asn Cys Pro His Gly Arg Pro Thr Met Arg
170           835           840           845
171 His Val Ala Asn Leu Asp Val Ile Ser Gln Asn
172           850           855

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174 <210> SEQ ID NO: 6

175 <211> LENGTH: 3056

176 <212> TYPE: DNA

177 <213> ORGANISM: Mus musculus

178 <400> SEQUENCE: 6

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179 gaattccggg gaagggtcctg aagaatttcc agattcctga gtatcattgg aggagacaga      60
180 taactgttcg tcaggtaacg atgggtgata tgcacacaaa atgggtgttc ctggagacgc      120
181 gtcttttccc gagagcggca ccgcaactct ccgcgggtga ctgtgactgg aggagtcctg      180
182 cactcatgga gcaaacggaa ggcgtagta cagaatgtgc taagggcacc aagcctattg      240
183 atgggaagtc agtccatcaa atttgtcttg ggcaggtgat actcagttta agcaccgttg      300
184 tgaaggagtc gatagaaaat agtgtagatg ctggtgtctc tactattgat ctaaggctta      360
185 aaagactatg ggtggacttc attgaagttt cagacaatgg atgtggggtg gaagaagaaa      420
186 acctgaaggy tctagctctg aaacatcaca catctaagat tcaagagttt gcgcacctca      480
187 cgcaggttga aactttcggc ttctgggggg aagctctgag ctctctgtgt gcacttaagt      540
188 atgtcactat atctacctgc cagcgggtctg caagcgttgg gactcgactg gtgtttgacc      600
189 ataattggga aatcaccacg aaaactcctt acccccgacc taaagggaac acagtccagt      660
190 tgcagcactt attttataca ctaccctgtc gttacaaaga gtttcagagg aacattaaaa      720
191 aggagtattc caaaatggtg caggtcttac aggcgtactg tatcatctca gcagggtctc      780
192 gtgtaagctg cactaatcag ctccgacacg ggaagcggca cgtgtgtgtg tgcacaagcg      840
193 gcacgtcttg catgaaggaa aatatcgggt ctgtgttttg ccagaagcag ttgcaaaagg      900
194 tcatttcctt ttttcagctg cccctcagtg acgtgtgttg tgaagagtag ggcctgagca      960
195 ctccaggacg ccacaaaacc ttttctaagt ttccgggttc atttcacagt gcacgcacgg      1020
196 cgcgcgggag agtgcacacg acaggcagtt tttcttcata aatcagaggg cctgtgaccc      1080

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/707,468B

DATE: 11/03/2003

TIME: 11:01:10

Input Set : N:\Cr4\12112002\I707468A.raw

Output Set: N:\CRF4\01032003\I707468B.raw

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197 agcaaaaggtc totaagcttg tcaatgaggt tttatcadat gtataaaggc catcagtaac 1140
198 catttgctgt ccttaacgtt tccgttgaat cagaatgtgt ggatattaat gtaactccag 1200
199 ataaaaggca aattctacta caagaagaga agtatattgt ggcggtttta aagacctcct 1260
200 tgataggaat gtttgacagt gatgcacaca agottaatgt caaccagcag ccactgctag 1320
201 atgttgaaag taacttagta aagctgcata ctgcagaaat agaaaaggct gtcacaggaa 1380
202 agcaagataa ctctcttcca ctgaagagca cagcagacga gaaaagggtt gctccatctt 1440
203 ccaggctgag agaggccttt tctcttcata ctactaaaag ggtcaagtct aggggtccag 1500
204 agactgctga actgacacgg agttttccaa gtgagaaaaa gggcggtgta tctctttatc 1560
205 ctccagacgt catctcttac agaggcctcc gtggctcgca ggacaaaatt gtgagtcoca 1620
206 cggacagccc tgggtgactgt atggacagag agaaaataga aaaagactca gggctcagca 1680
207 gcaactcayc tggctctgag gaagagttca gcaccccaga agtggccagt agcttttagca 1740
208 gtgactatca cgtgagctcc ctagaagaca gaccttctca ggaaaccata aactgtggtg 1800
209 actcggactg ccgtctctca ggtacaggac agctcttgaa gccagaagac catggatctc 1860
210 aatgcasaac tctaccteta gctcgtctgt caccacaaa tgcacagcgc ttcaagacag 1920
211 aggaaga c ctcaaatgtc aacatttctc aaagattgcc tggctctcag agcaactcag 1980
212 cagctgagtt ccatgtagcc ataaaaatga ataagaqaat cgtgctctctc gaggttctctc 2040
213 tgagttctct agctaagcga atgaagcagt tacagcacct aaaggcgag aacaaacttg 2100
214 aactgagtta cagaaaaatt agggccaaga ttggcccttg agaaaaacca gcagcagaag 2160
215 atgaactcag aaaagagatt agtaaatcga tgtttgcaga gatggagatc ttgggtcagt 2220
216 ttaacctgag atttatagta accaaactga aagaggacct ctctctggtg gaccagctg 2280
217 ctgcggatja gaagtacaac ttgagatgc tgcagcagca caagggtgct caggcgcaga 2340
218 ggtcctctcc accccagact ctgaacttaa ctgctgtcaa tgaagctgta ctgatagaaa 2400
219 atctggaaat attcagaaag catggcttgg actttgtcat tgatgaggat gctccagtc 2460
220 ctgaagaggc taaattgatt tctttaccaa ctagtataaa ctggaccttt ggaccccag 2520
221 atatagatja actgactctt atgttaagtg acagccctgg ggtcatgtcc cggccctcac 2580
222 gagtcagaca gatgtttgct tccagagcct gtccgaagtc agtgatgatt ggaaaggcgc 2640
223 tcaatgcgag cgagatgaag aagtcctca cccacatggg tgagatggac cacccttgga 2700
224 actgccccca cggcaggcca accatgagcc acgttgccaa tctggatgtc atctctcaga 2760
225 actgacacac ccttgttagc atagagtata ttacagattg ttcggtttgc aaagagaagg 2820
226 tcttaagtaa tctgattatc gttgtacaaa aattagcatg ctgctttaat gtactggatc 2880
227 catttaaaag cagtgttaag gcaggccatga tggagtgttc ctctagctca gctacttggg 2940
228 tgatccgggt ggagctcatg tgagcccagg actttgagac cactccagac cacattcatg 3000
229 agactcaatt caaggacaaa aaaaaaaga tatttttgaa gccttttaaa aaaaaa 3060

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191 (210) SEQ ID NO: 7

192 (211) LENGTH: 362

193 (212) TYPE: PFI

194 (213) ORGANISM: Homo sapiens

195 (400) SEQUENCE: 7

```

196 Met Glu Arg Ala Glu Ser Ser Ser Thr Glu Pro Ala Lys Ala Ile Lys
197 1 5 10 15
198 Pro Ile Asp Arg Lys Ser Val His Gln Ile Cys Ser Gly Gln Val Val
199 20 25 30
200 Leu Ser Leu Ser Thr Ala Val Lys Glu Leu Val Glu Asn Ser Leu Asp
201 35 40 45
202 Ala Gly Ala Thr Asn Ile Asp Leu Lys Leu Lys Asp Tyr Gly Val Asp
203 50 55 60
204 Leu Ile Glu Val Ser Asp Asn Gly Lys Gly Val Glu Glu Glu Asn Phe
205 65 70 75 80
206 Glu Gly Leu Thr Leu Lys His His Thr Ser Lys Ile Gln Glu Phe Ala

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/707,468B

DATE: 01/03/2003
TIME: 11:01:11

Input Set : N:\Crf4\12112002\I707468A.raw
Output Set: N:\CRF4\01032003\I707468B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 5,11
Seq#:4; N Pos. 2

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 4

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/707,468B

DATE: 11/07/03

TIME: 11:11:11

Input Set : N:\Crf4\12112002\I707468A.raw

Output Set: N:\CRF4\01032003\I707468B.raw

1:0 M:41 C: Current Application Number differs, Wrong Format
1:41 M:341 W: (46) "x" or "Xaa" used, for SEQ ID#:3 after pos.:
1:55 M:41 W: (46) "x" or "Xaa" used, for SEQ ID#:4 after pos.:



Creation date: 09-04-2003
Indexing Officer: NNGUYEN7 - NAM NGUYEN
Team: OIPEBackFileIndexing
Dossier: 09707468

Legal Date: 02-24-2003

No.	Doccode	Number of pages
1	SRNT	1

Total number of pages: 1

Remarks:

Order of re-scan issued on